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DATE MAILED: 06/15/2004

| APPLICATION NO.       | FILING DATE |            | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.   | CONFIRMATION NO  |  |
|-----------------------|-------------|------------|----------------------|-----------------------|------------------|--|
| 10/657,223 09/08/2003 |             | 09/08/2003 | Anthony Jenkins      | ITI-5C                | ITI-5C 8830      |  |
| 1218                  | 7590        | 06/15/2004 |                      | EXAMINER              |                  |  |
| CASELLA 6             | & HESP      | OS         | FERNANDEZ, KALIMAH   |                       |                  |  |
| 274 MADISON AVENUE    |             |            |                      | ART UNIT PAPER NUMBER |                  |  |
| NEW YORK, NY 10016    |             |            |                      | 2881                  | THE DICTION DELT |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | ·   | Application       | n No.   | Applicant(s)   |        |  |  |  |  |
|--|---|-------------------|---|----------------|--------|--|--|--|--|
|  |   | 10/657,22         |   | JENKINS ET AL. |        |  |  |  |  |
|  | Office Action Summary   | Examiner          | <del></del>   | Art Unit       |        |  |  |  |  |
|  | ·   | Kalimah F         | ernandez  | 2881           |        |  |  |  |  |
|  | The MAILING DATE of this communication  |                   |   |                | dress  |  |  |  |  |
| Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  |   |                   |   |                |        |  |  |  |  |
| <ul> <li>If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.</li> <li>If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).</li> <li>Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul> |   |                   |   |                |        |  |  |  |  |
| Status   |   |                   |   |                |        |  |  |  |  |
| 1)   | Responsive to communication(s) filed on _   | ·                 |   |                |        |  |  |  |  |
| 2a) <u></u> ☐  | This action is <b>FINAL</b> . 2b)⊠  | This action is no | on-final.   |                |        |  |  |  |  |
| 3)□  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. |                   |   |                |        |  |  |  |  |
| Disposition of Claims  |   |                   |   |                |        |  |  |  |  |
| 4)🖂  | 4)⊠ Claim(s) <u>1-25</u> is/are pending in the application.   |                   |   |                |        |  |  |  |  |
| • —-   | 4a) Of the above claim(s) is/are withdrawn from consideration.  |                   |   |                |        |  |  |  |  |
| 5)🛛  | 5) Claim(s) <u>9-11 and 20-25</u> is/are allowed.   |                   |   |                |        |  |  |  |  |
| 6)⊠  | ☑ Claim(s) <u>1,3,12-15 and 19</u> is/are rejected.   |                   |   |                |        |  |  |  |  |
|  | ☑ Claim(s) <u>2,4-8 and 16-18</u> is/are objected to.   |                   |   |                |        |  |  |  |  |
| 8)   | Claim(s) are subject to restriction and/or election requirement.  |                   |   |                |        |  |  |  |  |
| Applicati  | ion Papers  |                   |   |                |        |  |  |  |  |
| 9) The specification is objected to by the Examiner.   |   |                   |   |                |        |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>9-8-03</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.  |   |                   |   |                |        |  |  |  |  |
|  | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |                   |   |                |        |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |                   |   |                |        |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |                   |   |                |        |  |  |  |  |
| Priority (   | under 35 U.S.C. § 119   |                   |   |                |        |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  |   |                   |   |                |        |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:   |   |                   |   |                |        |  |  |  |  |
| 1. Certified copies of the priority documents have been received.  |   |                   |   |                |        |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |   |                   |   |                |        |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  |   |                   |   |                |        |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |                   |   |                |        |  |  |  |  |
|  | see the attached detailed office detail for t   |                   |   | <del></del>    |        |  |  |  |  |
| Attachmer  | at(s)   |                   |   |                |        |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  |   |                   |   |                |        |  |  |  |  |
| 3) 🔯 Infor   | ce of Draftsperson's Patent Drawing Review (PTO-94 mation Disclosure Statement(s) (PTO-1449 or PTO/S er No(s)/Mail Date 9-08-03.  |                   | Paper No(s)/Mail Do 5) Notice of Informal F 6) Other: |                | O-152) |  |  |  |  |

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#### **DETAILED ACTION**

### Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1,12-13, and 19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of U.S. Patent No. 6,642,513. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference amounts to obvious omission of an element and its function in a combination where the remaining elements perform the same function as before involves only routine skill in art. In particular, the present claims omit the following elements: 1) flat porous traps and 2) desorber. The remaining

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elements: a first and second dryer; a valve means for selectively placing the first and second dryers in communication with the desorber, and heaters substantially adjacent the respective dryers and being selectively operable for recharging the dryers perform the same functions of the presented claim. Here, the detector apparatus of the instant claim without the stated omitted elements (i.e. flat porous traps and desorber) and the concomitant loss of the advantages of gained therefrom would be prima facie obvious because the remaining elements (i.e. dryers and valve means) are functionally and physically identical to the patented claims. In re Karlson, 136 USPQ 184. The added structure of the patented claim serves a particular purpose in that the peculiar flat porous trap and desorber act to improve trapping of trace particles. If these additional features are not desired, it would be a matter of routine skill to eliminate it and the function it serves. In re Larson, 144 USPQ 347.

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3. Similarly, the instant claims 12-13 and 19 omit the flat porous traps, which performs a peculiar purpose. Here, the instant claim 12 recites traps, a desorber, a heater, and a dryer assembly having at least first and second dryers and a valve for selectively placing one of the dryers in

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communication with the desorber while substantially isolating the other of the first and second dryers from the desorber.

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4. Claims 3, and 14-15 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim of U.S. Patent No. 6,642,513 in view of US Pat No 5,491,337 issued to Jenkins. The instant claims are obvious variation, wherein the US Pat. No 5,491,337 is relied upon to illustrate the use of ion trap mobility spectrometer are notoriously old in the art (see col.2, lines 13-19).

## Allowable Subject Matter

- 5. Claims 2, 4-8 and 16-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 6. Claims 9-11 and 20-25 are allowed. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to teach or obviously suggest the claimed invention.

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7. Specifically, no teaching or obvious suggestion was found of the limitation "two heaters associated respectively with the dryers for heating the dryers sufficiently for vaporizing moisture collected therein and enabling the vaporized moisture to be purged from the respective dryer, whereby the dryer and heaters are operated alternately for enabling a substantially continuous stream of dried air to be in communication with the detector and enabling substantially continuous operation of the detector" as in claim 9.

- 8. Similarly, claim 12 recites the limitation "valve for selectively placing one of the dryers in communication with the desorber while substantially isolating the other of the first and second dryers from the desorber" in combination with the recited traps, a desorber, a heater, and a dryer assembly having at least first and second dryers.
- 9. No teaching or obvious suggestion was found of the limitations "directing a stream of air through the operated dryer for transferring moisture from the stream of air to the operated dryer to produce a stream of dry air; directing the stream of dry air from the operated dryer toward an object to be tested for particles of interest and then toward the detector; recharged the non-operated dryer; and switching the stream of air from one

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of the dryers to the other after the non-operated dryer has been at least partially recharged and before the operated dryer has become saturated" as in claim 20.

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- 10. Similarly, claim 24 recites the limitation "recharging a second dryer for purging water from the second dryer while the stream of air is directed through the first dryer; and redirecting the stream of air through the second dryer after the second dryer has been at least partly recharged and before the first dryer has become saturated with water; and recharging the first dryer while the stream of air is directed through the second dryer."
- 11. Lastly, no teaching or obvious suggestion was found of the limitations "terminating the first flow of dried air from the first dryer and operating the second dryer for producing a second flow of dried air; directing a first portion of the second flow of dried air towards the detector for transporting potential particles of interest into the detector; diverting a second portion of the second flow of dried air from the second dryer to the first dryer and simultaneously heating the first dryer for liberating moisture from the first dryer, whereby the first and second dryers are operated sequentially prior to either of the first and second dryers being saturated for permitting continuous operation of the detector" as in claim 25.

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12. Claims 10-11 and 21-23 are allowed by virtue of their dependence.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Pat No 5,405,781 issued to Davies et al teaches a two-stage dryer (col.3, lines 26-34; col.6, lines 37-56). In addition, US Pat No 4,317,995 issued to Bradshaw is considered relevant to the claimed invention. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kalimah Fernandez whose telephone number is 571-272-2420. The examiner can normally be reached on Mon-Tues 6:30-3:30; Wed-Thurs 8-5 and Fri.9am-6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 571-272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

SUPERVISORY PATENT EXAMINER

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).